



## THE VOICE OF EUROPEAN HUNTERS

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### Agriculture practices and schemes beneficial to small game

#### Introduction

As hunters, the discussion on the CAP post 2020 and the measures beneficial to biodiversity and small game are close to our hearts. The ongoing biodiversity crisis puts in peril the ability to hunt wild small game for future generations.

Hunters are aware of this and invest their own time and resource in conservation projects across Europe. As explained in our [FACE Biodiversity Manifesto](#), the majority of these projects take place on farmlands.

Nevertheless, much more is required to reverse biodiversity loss in Europe. The CAP post 2020 provides incentives to introduce agricultural practices beneficial to small game both under the new eco-schemes and the agri-environmental measures.

#### Eco-schemes - Pillar I financed by the EU

Eco-schemes represent a new tool introduced for the first time in the new CAP. The commitment is annual, and the land concerned must be eligible for direct payments. They are compulsory for Member States but not for farmers.

25% of the budget for direct payments (pillar I) will be allocated to eco-schemes, providing stronger incentives for climate-and environment-friendly farming practices and approaches (such as organic farming, agro-ecology, carbon farming, etc.) as well as animal welfare improvements.

#### Agri-environmental schemes Pillar II co-financed by the EU and Member States

Agri-environmental schemes (AES) entail a multi-annual commitment (5-7 years). The land concerned does not have to be eligible for direct payments. The possible beneficiaries are farmers and land managers. They are compulsory for Member States but not for farmers.

30% of the budget of the total European Agricultural Fund for Rural Development (pillar II) will be devoted to intervention addressing specific environmental and climate-related objectives.

AES can be broadly divided into those focusing on biodiversity conservation, and those focusing on ecosystem services. For example, a *biodiversity conservation scheme* might involve habitat protection for species of conservation concern, such as the protection of semi-natural, species-rich grassland for farmland birds. An *ecosystem services scheme*, on the other hand, might focus on more general, systematic goals related to environmental benefits and the provision of ecosystem services, such as improving water quality, or measures such as beetle banks or providing flowering strips to encourage pollinator species. These schemes tend to target more common species.

Another form of AES are the results-based schemes, which focus on payments that reward improvements in farmland biodiversity. In contrast with the standard 'prescription-based' model, result-based agri-environment payment schemes (RBAPS) award payments to farmers based on the environmental quality outcome that is delivered, i.e., achievements. For example, habitat condition is scored, and the highest payment is awarded to the best output (e.g., quality habitat). Assessments are based on objective assessment criteria (indicators). the Irish Burren model (Parr et al. 2010), is an example of a successful scheme, which

was developed with farmers, farming representatives and ecologists ([RBAPS Project](#)). With this method, quality implementation of the schemes are assured.

The European Commission launched pilot on-farm projects in 2014-15 and is now developing a web-based platform that brings together research, information and practical experiences on results-based agri-environment schemes, including pilot projects reports. More information can be found [here](#).

Below is a list of 10 examples of possible agriculture practices focusing on benefits to small game and birds that hunters want to have included in the CAP Strategic Plans.

### 1. Managed grass margins/strips and flower or seed strips/plots

The different types of managed strips, plots and margins such as flower or seed strips and grass buffer margins offer a variety of benefits to wildlife in general, including small game such as partridges, pheasants or hares. These interventions typically involve the sowing of flowering plants or grass-rich seed mixture in agricultural land areas such as field margins, enhancing landscape heterogeneity.

The positive effects of these measures on wildlife have been well studied and proven by the review of many studies (Dicks *et al.*, 2020) and wildflower plots are the key habitat measure recommended by PARTRIDGE Interreg.

The cover created provides good food resources both in terms of invertebrates and plants material (e.g., seeds and buds), therefore benefiting both insectivorous and granivorous species. Insects-rich areas are of paramount importance for small game species such as the Grey Partridge (*Perdix perdix*) during the rearing season as chick depend on protein food during their early stage of life (Holland *et al.*, 2012, Southwood & Cross, 2002, Borg & Toft, 2000, Potts, 1986, Green, 1984, Ford & Middleton, 1938). These measures can also provide good cover to shelter against bad wheatear and more importantly, for nesting.

Indeed, Grey Partridge breeding density depends on the amount of available nesting cover: the more high-quality cover, the higher partridge breeding densities (Kuiper *et al.*, 2010, Bro & Clobert, 2000, Panek, 1997, Sotherton, 1991, Carroll, 1992, in PARTRIDGE Interreg).

### 2. Uncultivated margins

This measure typically relates to allowing field margins vegetation to regenerate naturally, without planting. Similar to managed grass, flower and seed strips, uncultivated margins benefit wildlife and small game species by improving feeding and sheltering conditions and enhancing landscape heterogeneity. The positive effects of these measures on wildlife have been well studied and proven by the review of many studies (Dicks *et al.*, 2020), including the Grey Partridge (PARTRIDGE Interreg).

### 3. Planting and maintaining hedges

The planting and maintain of hedges in agricultural landscape contributes to breaking the uniformity of the landscape and creates wildlife friendly perennial features.

Hedgerows provide important habitat for nesting, feeding and sheltering for birds in agricultural areas (Batáry *et al.*, 2010) as well as food resources for overwintering wildlife (Staley *et al.*, 2012) and especially the Grey Partridge (PARTRIDGE Interreg).

In addition, hedges often have multiple functions (Barr and Petit, 2001) and provide multiple benefits for farming practices such as wind breaks, shadow for livestock, water retention, water run-off and soil erosion limitation, carbon sequestration, etc.

### 4. Skylark plots

Skylark plots are undrilled patches in agricultural fields, easily created by briefly switching off the drill when sowing. The presence of such plots improves Skylarks' (*Alauda arvensis*) use of the landscape and breeding productivity (Fischer *et al.*, 2009, Stoate & Moorcroft, 2007, Ogilvy *et al.*, 2006, Donald & Morris, 2005, Morris *et al.*, 2004, Odderskær *et al.*, 1997).

## 5. Tree plots

The planting of tree islets in agricultural landscape enhances biodiversity and provide a range of ecosystem services (Benayas *et al.*, 2008). This measure acts as an additional perennial feature in the landscape and offers shelter to small game species as well as other farmland bird species such as the Corn Bunting (*Emberiza calandra*) or the Yellow Wagtail (*Motacilla flava*) (Faunes & Biotopes, 2021A).

## 6. Winter cover crops

The establishment of a winter cover allows wildlife to find refuge and food resources during the winter, when the crops have been harvested (Faune&Biotopes, 2021B). These covers include grasslands, catch crops, stubbles, etc. Unlike agricultural soils left bare during the winter, this measure also provides ecosystem services such as soil improvement, water run-off and soil erosion limitation, etc. For the Grey Partridge, winter survival is improved by cover and food (PARTRIDGE Interreg).

## 7. Organic farming

Organic farming typically is a form of agroecological farming offering numerous ecological benefits and relying on ecologically based pest controls and biological fertilizers as a response to the environmental harm caused by the use of chemical pesticides and synthetic fertilizers in conventional agriculture (Adamchak, 2021). Indeed, many studies show that reducing fertilizer, pesticide or herbicide use benefit farmland birds, invertebrates, plants and soil organisms (Dicks *et al.*, 2020). While enhancing farmland birds (Batáry *et al.*, 2011), this practice can benefit the Grey Partridge in particular as it has been demonstrated that survival rates of chicks were significantly higher on low application farms than on high application farm (Aebischer & Potts 1998). Other bird species and invertebrates have been found to benefit from reduced input. For example, Henderson *et al.* (2009) found that densities of farmland bird species and ground beetles were higher on areas with no pesticide input, compared to areas with conventional levels of pesticides, including the Skylark, Yellow Wagtail and Linnet (*Carduelis cannabina*). No fertilizer input also significantly benefited Skylarks.

## 8. Delayed mowing/harvest

The practice of delaying mowing/harvest aims to limit the loss of ground nesting bird's chicks. While it encompasses many bird species, it includes the Grey Partridge, for which it is important to wait until chicks can fly before mowing grass margins (PARTRIDGE Interreg). For example, it is often recommended not to mow before August 15.

## 9. Agroecology

Agroecology is a holistic and integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of sustainable agriculture and food systems (Agroecology Knowledge Hub, FAO). By doing so, these systems enhance both farming production and environment-friendly practices and provide tools to mitigate issues often generated by intensive agriculture such as loss of biodiversity and habitats, soil degradation and flooding or emissions. Unlike intensive agriculture, the focus is put on the long-term sustainability of the production system.

The integration of various practices based on ecological concepts benefits wildlife on agricultural landscapes, for example by increasing semi-natural habitats or reducing fertilizers and pesticides input. Agroforestry, which is combining trees and farming is a good example of agroecology.

## 10. Extensive grasslands

Agricultural intensification across Europe is a cause of deterioration of quality habitats for birds depending on open or semi-open environments, such as grasslands, leading to bird populations' decrease (Anderle *et al.*, 2020).

Extensively grazed grasslands are typically created by lowering the grazing intensity by livestock (i.e., decrease livestock densities to a desired level) and thus lowering fertilizer input as well. Unlike intensively used grasslands, these grasslands offer a diverse sward structure, rich in plants and invertebrates and

beneficial to a variety of birds (RSPB). Extensive grasslands provide both foraging (in both seeds and invertebrates) and nesting habitats for bird species such as the Skylark or Lapwing. Grazing intensity will define grass height which has to be set accordingly to the targeted bird species needs in terms of breeding requirements. For example, the lapwing requires short vegetation to breed, but the curlew needs taller vegetation (RSPB).

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